DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 1.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-025364

Address: 333 Burma Road Date Inspected: 26-Jul-2011

City: Oakland, CA 94607

Project Name: SAS Superstructure **OSM Arrival Time:** 700 **OSM Departure Time:** 1530 Prime Contractor: American Bridge/Fluor Enterprises, a JV Contractor: American Bridge/Fluor Enterprises, a JV **Location:** Jobsite

CWI Name: William Sherwood **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A **Qualified Welders:** Yes No N/A **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No **Delayed / Cancelled:** Yes N/A No

Bridge No: 34-0006 **Component: SAS OBG**

Summary of Items Observed:

Quality Assurance Inspector (QA) Douglas Frey was at the American Bridge/Fluor (ABF) job site at Yerba Buena Island in California between the times noted above in order to monitor Quality Control functions and the in process work being performed by ABF personnel. The following items were observed:

- 1. 11E 12E Edge Plate F (Interior)
- 2. 11E 12E Edge Plate B/F (Exterior)
- 3. 10E 11E D R1 (Exterior)
- 4. 11E 12E C (Interior)
- 5. 9E PP74 E5.5 (Exterior)
- 6. 12E PP106.5 E3 (Exterior)
- 7. 1E PP8.5 E3 (Interior)
- 8. Confirmation Survey
- 1. 11E 12E Edge Plate F (Interior)

The QA inspector randomly observed ABF welder Fred Kaddu ID#2188 grinding and blending the completed weld on edge plate F at 11E 12E on the interior of the OBG in preparation for inspection. The QA Inspector observed the QC Inspector identified as Pat Swain perform a Visual and Magnetic Particle inspection with no indications observed.

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2. 11E 12E Edge Plate B/F (Exterior)

The QA inspector performed a Magnetic Particle Test (MT) on Edge Plate B and Edge Plate F at 11E 12E on the exterior of the OBG. The QA Inspector tested 10% of the weld to verify the weld and testing by QC meet the requirements of the contract documents. The QA inspector noted that the work appeared to be free of defects and was found to be acceptable and in general conformance with the contract documents.

3. 10E 11E D R1 (Exterior)

The QA inspector noted the dimensions of the excavations at D2 y=2950 as 90mm's in length and 11mm's deep. y=3330 as 100mm's in length and 11mm's deep. The QA Inspector observed the QC Inspector identified as John Pagliero perform Magnetic Particle inspection on the sites and found them to be acceptable. The QA inspector observed ABF welder Wai KitLai ID#2953 perform Shielded Metal Arc Welding (SMAW) in the 4G overhead position with the QC inspector being present in order to monitor the progress and ensure the welding parameters were in compliance pertaining to ABF-WPS-D15-1001-Repair. The QA inspector noted that the work is in progress and appeared to be in general conformance with the contract documents.

4. 11E 12E C (Interior)

The QA inspector randomly observed ABF welder Fred Kaddu ID#2188 perform SMAW in the 3G vertical position on side plate C at 11E 12E inside of the OBG. The QA Inspector observed the QC Inspector identified as John Pagliero being present in order to monitor the progress and ensure the welding parameters were in compliance pertaining to ABF-WPS-D15-1110-A Rev. 1. The QA inspector noted that the work is in progress and appeared to be in general conformance with the contract documents.

5. 9E PP74 E5.5 (Exterior)

The QA inspector randomly observed ABF welder Eric Sparks ID# 3040 performing SMAW in the 2F horizontal position on the Storm Ties for the temporary "Catwalk" located at 9E PP74 E5.5, 9E PP75 E5.5 and 10E PP90 E5. 5. The QA Inspector observed the QC Inspector Fred Von Hoff as being present in order to monitor the progress and ensure the welding parameters were in compliance pertaining to ABF-WPS-D15-F1200A. The work was completed on this date and the QA inspector noted that the work appeared to be in general conformance with the contract documents.

6. 12E PP106.5 E3 (Exterior)

The QA inspector randomly observed ABF welder Xiao Jian Wan ID#9677 performing Flux Core Arc Welding (FCAW) in the 2F horizontal position on the Storm Ties for the temporary "Catwalk" located at 12E PP106.5 E3. The QA inspector observed the QC Inspector Fred Von Hoff as being present in order to monitor the progress and ensure the welding parameters were in compliance pertaining to ABF-WPS-D15-F2200-1. The work was completed on this date and the QA inspector noted that the work appeared to be in general conformance with the contract documents.

7. 1E PP8.5 E3 (Interior)

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The QA inspector performed straight beam Ultrasonic Testing on random areas adjacent to the lifting lugs at 1E PP8.5 E3, 1E PP9.5 E3, 1E PP11 E3, 5E PP31 E4, 6E PP44 E3, 11E PP101 E4, 12E PP111 E4, 11W PP104 E3 and 12W PP111 E4. The testing appeared to be free of indications and was found to be acceptable. The scan was performed in the defined UT area on drawings ZPM-04-01-001216 to ZPM-04-01-001219 where accessible. The work was completed on this date and appeared to be in general conformance with submittal 1635 Rev.00.

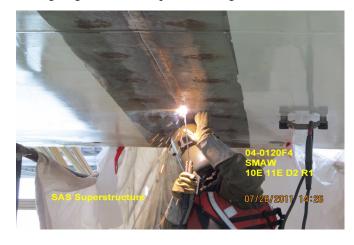
Confirmation Survey

The QA inspector performed a confirmation survey of the lamination scan on the area adjacent to the lifting lugs and found that the following locations and dates had been inadvertently omitted by the QA Inspector. 6/14/2011-1W PP11 W3 #1-4, 1W PP11 W4 #1-4, 1W PP8.5 W3 #1,2 and 3,1W PP9.5 W3 #1,2 and 3, 1W PP8.5 W4 #1, 3 and 4, 1W PP9.5 W4 #1, 3 and 4, 2W PP15 W3 # 2, and 3, 2W PP15 W4 # 2 and 3, 3W PP22 W3 #3. 6/15/2011- 5W PP31 W3 #4. 7/8/2011- 1E PP8.5 E3 #1, 1E PP8.5 E4 #2 and 4, 1E PP9.5 E3 #2 and 4, 1E PP9.5 E4 #1-4, 4E PP 27 E3 # 1, 5E PP31 E3 #1.

Summary of Conversations:

At the beginning the shift the QA Inspector met with QC Inspector William Sherwood and discussed the welders assignments and locations for the shift to include pending issues, ongoing work and required testing.





Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy 510-385-5910, who represents the Office of Structural Materials for your project.

Inspected By:	Frey,Doug	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer